# How environmental storylines shaped regional planning policies in South East Queensland, Australia: A long-term analysis

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ABSTRACT

This paper examines how storylines shaped policy responses to environmental imperatives in an Australian regional planning system between 1991 and 2017. It builds upon existing literature that utilizes the 'storylines' conceptual model to distil and critically examine how discursive framing can shape environmental policy responses. This paper empirically establishes storylines within the regional planning system of South East Queensland, Australia that discursively shaped policy responses to three specific environmental imperatives: protecting regional biophysical features, sustainability, and climate change. It critically discusses how storylines associated with each imperative discursively framed and influenced planning policy responses at the regional scale. It reports how planning policies evolved as each environmental imperative was institutionally detected, discursively framed through storylines and responded to through regional-scale policy frameworks.

## 1. Introduction

Studies into discourse, that is analysing language in action, helps to identify the dynamics between thought and action across time and space. In terms of policy and politics, discourse helps to understand how problems are defined and acted upon and why some discursive frames become dominant, while others are marginalised. This paper adds to conceptual and empirical understanding about how institutional discourse occurs, is conditioned and shapes policy frames (Bulkeley, 2000; Coffey and Marston, 2013; Fisher, 2012; Hajer, 1993, 1995; Hajer and Versteeg, 2005; Lidskog and Elander, 2012). It also adds new knowledge to scholarly debates concerned with the efficacy of regional planning as a superior means of responding to environmental imperatives (Gleeson et al., 2010; Gore and Robinson, 2009; Hodson and Marven, 2009 Matthews, 2013; Mason and Fragkias, 2018). This paper adds to both debates through its specific analysis, which employs Hajer's (1993, 1995) storylines model to identify and discuss storylines that institutionally conditioned policy responses to environmental imperatives within the regional planning system of South East Queensland (SEQ) Australia. In addition, it improves understanding of how evolving environmental imperatives drove regional planning responses in SEQ over many years. It also provides new analysis of how this evolution occurred effectively in a traditionally pro-growth and politically conservative region with no formal tier of regional government.

The conceptual model of 'storylines' presented by Hajer characterizes storylines as institutional narratives "through which elements from many different domains are combined and that provide actors with a set of symbolic references that suggest a common understanding" (Hajer, 1995, p. 62). This paper critically examines how seven different storylines played particular roles in shaping regional planning policy as environmental imperatives were institutionally detected, interpreted and responded to over 26 years, from 1991 to 2017. This paper reports how storylines shaped responses to three environmental imperatives within the SEQ regional planning system: protecting regional environmental and biophysical features, sustainability, and climate change. It evaluates the dynamics of the storylines, their evolution through time and institutional movements from one storyline to another. The struggles between newly emerging storylines and those already in existence are discussed and contextualised through depictions of the institutional discourses that articulated, prioritised or diminished particular storylines. Examinations of the dynamics and destabilisations in the institutional order of South East Queensland's regional planning system over 26 years form a backdrop to the analysis. They demonstrate shifting institutional recognition and acceptance of particular environmental concerns. The paper concludes that the storylines did not spontaneously manifest but were shaped and conditioned over time by external events, as well as institutional actors, agencies and processes.

## 2. Policy frames and storylines

In liberal democracies, the process of policy-making and policy change requires pursuing a range of influential strategies to ensure policy actors, including the public, legitimize decisions. The discursive realm is critically important in this regard as policy-making is largely a communicative event that is structured by a range of competing discourses that shape and condition the dynamics of institutional and organisational change (Kingston and Caballero, 2009; Marston, 2004). Bacchi (2009) adopts what she refers to as a 'what's the problem approach' to policy analysis, where the emphasis is on understanding how the policy problem is framed because this contains an explicit or implicit diagnosis about how the problems should be addressed. The way policy meanings are constructed and conveyed involves a process of discursive framing where choices are made about the narrative structure, the relevant policy actors and the attribution of personal agency (Yanow, 1997). How policies are framed can make them more palatable to the general public, depending on the extent to which the representations concur with socio-cultural norms (Torfing, 1999). Concepts such as 'freedom' and 'democracy', for example, are ideas that are institutionalised and have a powerful symbolic purchase on the public imagination when it comes to demanding action on any given social issue. Similarly, in relation to the environment and planning there are competing narratives around how best to respond to various risks to human health and wellbeing, such as pollution, climate change or overpopulation. As such, discourse reflects 'real world' events and technical interpretations of those events, as well as political interpretations that are in turn linked to party political ideology and interest and pressure group politics. Institutional responses to these issues do not arise from a natural-scientific urgency about them, but from the symbols and experiences that govern the way people think and act in relation to the construction of risk and risk management (Hajer and Versteeg, 2005).

Ongoing scholarship debates how 'storylines' can condition organisational and public responses to new or emerging environmental imperatives (Bulkeley, 2000; Coffey and Marston, 2013; Fisher, 2012; Hajer, 1993, 1995; Hajer and Versteeg, 2005; Lidskog and Elander, 2012). Storylines are commonly held institutional narratives that can frame institutional discourses and shape policy responses to new or emerging imperatives. They can exert strong influence by discursively framing environmental imperatives and turning them into compelling narratives requiring policy responses. The discursive power of storylines means that they can condition, facilitate or block the development of policy responses to specific environmental imperatives. As such, storylines are "prime vehicles of change" that can shape institutional contexts and environmental policy directions (Hajer, 1995, p. 63). Hajer developed the storylines concept to test how particular narratives promoted or blocked institutional responses to the emergence of ecological modernization as an environmental language used to address the acid rain imperative in the UK and the Netherlands (Hajer, 1993, 1995). The research shows that storylines influence institutional responses by discursively framing specific issues and establishing them as compelling policy narratives.

The storylines model is widely regarded in scholarship as a means to distil and examine how discursive framing can shape policy responses to environmental imperatives. Scholarly discussions on how institutional discourses can shape the nature and character of environmental policies are on going. For example, Coffey and Marston (2013) use the storylines model to examine the discursive space associated with environmental policy debates in Victoria, Australia. They demonstrate that dominant sustainability storylines within the state government tended to reflect neoliberal principles and weak interpretations of ecological modernization. This led to environmental policy outcomes that limited the importance of sustainability, constrained the types of policy responses that could be advocated and reinforced market-based responses to sustainability over other more transformative ideas. Shin and Choi (2014) use storylines to focus on what kinds of environmental

risks were prioritized by successive British governments from the mid-1990s. They discuss how the selections were discursively justified and how they were integrated with concerns pertaining to other risks. They conclude that dominant storylines linked to risks associated with climate change, but that other storylines of associated risks, including energy security and nuclear power, also appeared. Shin and Choi's (2014) work identifies a clear link between risk narratives and environmental policy development. Lidskog and Elander (2012) depict the Swedish environmental policy field as broadly characterized by storylines that frame sustainable development as intrinsically linked to strategies characterized by market orientation, collaboration and consensus between economic, environmental and social values.

In Australia, Burhs and Aplin (1999) suggest that successive governments have tended to follow a path of least resistance, a course that is perceived to be the least problematic in terms of political risk, rather than what is deemed ecologically rational or necessary. This is similar to what Plummer (2006) concluded in his analysis of Canadian resource management agencies, that there is little evidence that sustainability strategies are being translated into meaningful policy action. In their work analysing deliberative governance, Coaffee and Healey (2003) argue that it is important to identify how much of the discursive contestation within and between organisations is merely a ripple on the surface of a settled modality (deeper cultural assumptions and habits) and what is unsettling the whole culture of governance relations. In this sense, interpretations are more powerful than facts, hence the importance of analysing storylines to see how objects and subjects are assembled and legitimated and what sorts of ideas about the environment and humans underpin each story. In this regard, Stone (2002) argues that definitions of policy problems usually have narrative structure. Stone suggests that the storyline in policy writing is often hidden, but one should not be thwarted by the surface details from searching for the underlying story. It is this task that this paper now turns, to examine how competing storylines reveal a deeper conflict over fundamental storylines of how planning can respond to different environmental imperatives.

## 3. Case study selection and research design

South East Queensland (SEQ) is a heavily urbanized conurbation encompassing two of Australia's largest cities – Brisbane (3rd) and Gold Coast (6th). It is the most populous and intensely developed region in Queensland. A conurbation stretches along Australia's eastern coastline from the northern town of Noosa to the Queensland-New South Wales border, 200 km to the south. An intersecting, perpendicular conurbation runs approximately 130 km inland from Brisbane to the expanding city of Toowoomba. While the spatial form of the coastal conurbation continues without interruption across the border into northern New South Wales, the functional jurisdiction of the SEQ regional planning system terminates at NSW border.

The population of SEQ expanded substantially during the time frame relevant to this paper, from approximately 1.9 million residents in 1991 to 3.3 million in 2016 (ID, 2017). This intense growth added to the significant population expansion of the 1970s and 1980s (Skinner and Gillam, 1989). The challenge of managing rapid population and urban growth is exacerbated by the sub-tropical climate in SEQ, which makes the region prone to natural hazards and severe weather events including inland flooding, bushfires, coastal storm surges and heavy storms. Of further concern is the fact that the Intergovernmental Panel on Climate Change highlighted SEQ as one of Australia's most vulnerable regions to climate change (Hennessy et al., 2007).

Sustained regional population growth, urban expansion and associated environmental damage prompted the official formation of the SEQ regional planning system in 1991 (Abbott, 2012). The temporal focus of this paper begins at this juncture, though it is noted that efforts towards coordinated regional planning were considered in SEQ prior to then. Most notable was *The Moreton Region Growth Strategy* in the mid-

1970s. This comprehensive strategy for SEQ included planning strategies for coordinating land use, infrastructure, economic development and social issues. Though initiated by agreement between regional local governments, the Queensland State government and the Australian Federal government, the Strategy was never formally realized and was functionally abandoned after a change of Federal government in 1975 (Abbott, 2012).

The current regional planning system was created in 1991. It is sustained in partnership by successive Queensland state governments and local councils in the SEQ region, keeping continuity with its original governance arrangements (Abbott, 2001, 2012). The Australian Federal government is not involved, nor does SEQ have any formal tier of regional government. The system gained statutory footing in 2004. Since then all planning policies and regulations set by the SEQ regional planning system have statutory force and must be adhered to by both state and local governments. Adherence to regional planning policies and regulations was non-statutory prior to 2004 but compliance was high amongst governments (Abbott, 2012). That was because the foundation and spirit of the SEQ system was about partnership – a model largely appreciated by successive governments. The decision to change to a statutory system in 2004 was also taken in partnership (Abbott, 2012). The SEQ system is an internationally significant example of an intentionally designed regional planning system without a formal tier of regional government. Despite its unusual articulation, the system performs well in balancing governmental involvement across scales while managing various growth and environmental imperatives during its long operation (Abbott, 2001, 2012; Matthews, 2013).

There is no set method for delineating storylines despite their wide conceptual use in scholarship. While different scholars have employed different methodological approaches and rationales to identifying and interpreting storylines (cf. Coffey and Marston, 2013; Fisher, 2012; Hajer and Versteeg, 2005; Matthews, 2013; Yanow, 2000), there is no unilaterally accepted method. The approach to delineating storylines underpinning this paper draws on Yanow's (2000) method for conducting interpretive policy analysis. That interpretative method was applied to Hajer's storylines model. Doing so facilitated a methodological approach designed to deconstruct the architecture of policies by examining how institutional processes and cultures discursively conditioned particular policy outputs and expressions. In this approach, storylines act to discursively frame certain institutional issues before publicly expressing their articulation and responses through policy outputs. This methodological approach facilitates the identification of storylines by contextually examining policy frameworks and the interrogating institutional discourses that produced them.

The environmental storylines discussed in this paper were identified and interpreted through a chronological and thematic reading of 174 documents connected to SEQ regional planning between 1991 and 2016. The first task was to create a chronology of regional environmental planning policy priorities in SEQ, beginning in 1991. Potential storylines conditioning environmental responses were identified through a chronological and textual analysis of official plans, working reports, framework documents, information papers and minutes from meetings of core SEQ planning agencies, including the Regional Planning Committee, the Regional Coordination Committee and the Council of Mayors. Many texts were only available in hard copy or as crude scans due to their age. Therefore they couldn't be cleanly imported into coding software. Consequently, all textual analysis was carried out by hand to ensure methodological consistency. The process facilitated the closer identification and characterisation of emerging, evolving and abandoned storylines (see Diagram 1 ).

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the storylines was tested, refined and contextualised through interviews with 14 institutional actors closely involved in SEQ regional planning throughout the study period. Interview requests were sent to 18 actors in total but four declined. Average interview duration was approximately 1 h, with variation between 45 and 75 min. The interviews were transcribed and coded. Interview respondents were asked to discuss the validity and context of storylines identified through textual analysis, to identify and comment upon any related storylines and to identify invalid, incorrect, irrelevant or incomplete storylines so they could be excluded. This methodological process facilitated a robust identification and contextualisation of the seven storylines that underpin the empirical findings reported in this paper (see Table 1).

## 4. Storylines of environmental imperatives in South East Queensland (SEQ) regional planning

The seven storylines shaping responses to environmental imperatives within the SEQ regional planning system are discussed in this section. The specific environmental imperatives are: protecting regional environmental and biophysical features; sustainability; climate change. They are presented in sub-sections. The storylines connected to each are presented with bullet points at the beginning of each section for clarity and simplicity.

### 4.1. Storylines of protecting regional environmental and biophysical features

- *Regional planning can enhance capacity for protecting regional environmental and biophysical features*
- *'The environment' is malleable and can be related to a variety of environmental imperatives in the policy context of SEQ regional planning*

Rapid population growth emerged as a significant regional challenge in SEQ in the 1970s due primarily to substantial inward migration (Abbott, 2001). Governmental recognition of rapid population growth as a major stressor continued throughout the 1980s but coordinated planning responses did not eventuate. A major shock occurred in 1989, when a population report commissioned by the State government offered confronting assessments of future negative impacts related to predicted population trends in SEQ (Skinner and Gillam, 1989). It predicted that the population of SEQ would rise from 1.85 million to between 2.1 and 2.3 million by 2001; that between 150,000 and 250,000 new dwellings would be needed; that Brisbane and Gold Coast would become a single conurbation by 2001; and that local government areas bounding Brisbane would experience rapid population increases during the 1990s.

A Queensland State government election took place in 1989, soon after the population report was published. An Australian Labor Party (ALP) State government was elected. The new government quickly responded to widespread public concern, expressed through the media, which saw population growth as a major regional problem requiring decisive institutional action (Abbott, 2001). The government's first significant response was to convene a summit in December 1990, called *SEQ 2001 – A Framework for Managing Growth.* The summit brought together approximately 250 representatives from the government, academic, environmental, community and the private sectors. A major outcome of the summit was an undertaking to develop a regional planning framework for SEQ that would be capable of responding to negative impacts associated with rapid population growth. It was agreed that the framework would address land-use, infrastructural, environmental and social aspects of growth management (RPAG, 1992). It was agreed that regional planning would be run on a collaborative and cooperative basis, with responsibility and budgeting shared equally between the State government and the region's local governments. Input from a wide spectrum of stakeholders, including the non-government, community and environmental sectors, would
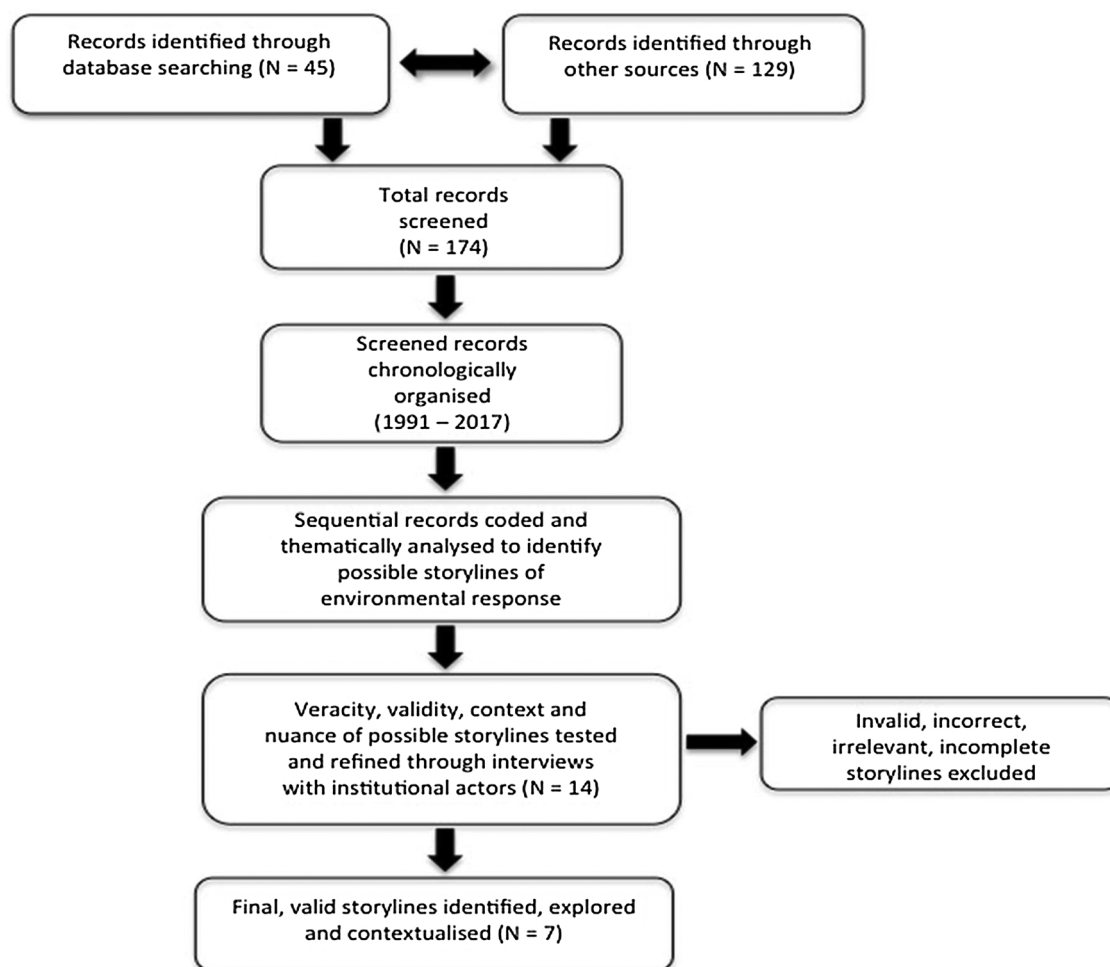
**Diagram 1.** Storyline identification flow diagram.

**Table 1**
Professional roles of interview respondents.

| Respondent | Professional Role |
|---|---|
| 1 | Senior planner, Queensland State Government |
| 2 | Senior planner, Queensland State Government |
| 3 | Private sector planner with numerous representative roles in regional planning |
| 4 | Environmental and community activist |
| 5 | Senior representative, environmental advocacy group |
| 6 | Policy advisor, Queensland State Government |
| 7 | Policy Advisor, Queensland State Government and various regional planning agencies |
| 8 | Coordinator, SEQ Regional Organization of Councils |
| 9 | Regional Planner, Council of Mayors |
| 10 | Executive Director of Planning Policy, Queensland State Government |
| 11 | Former Mayor of Noosa Council and Sunshine Coast Regional Council |
| 12 | Former Director, Queensland Dept of State Development, Infrastructure & Planning |
| 13 | External academic advisor contributing to SEQ Regional Plan formulation |
| 14 | Regional Planner, Queensland Government |

also be accepted (Abbot, 2012). Interview Respondent 3, a professional representative of SEQ regional planning since the early-1990s, reflected on the summit and noted that:

> The summit was a very substantial occasion, which really established a mandate that we really needed to manage growth.

Early discussions within SEQ regional planning focused on determining the aims, scope and capacity of the system to respond to regional challenges. Attention quickly began to focus on responding to regional environmental stresses and impacts associated with rapid population and urban growth. This was influenced by pressure from the community and non-government sectors, which forcefully argued that unregulated growth was no longer desirable for the SEQ region. The non-government sector sought to intensify institutional awareness that environmental and biophysical stresses were escalating across the region as a consequence of population growth, leading to diminished air and water quality, loss of open space and declines in biodiversity. Interview Respondent 4, an environmental organizer in SEQ, spoke of early perspectives on blending environmental protection and regional planning:

> Institutionalized growth management was an opportunity to embed

environmental safeguards within regional planning structures.

The need for environmental protection came from an emerging understanding that human settlement was exerting a heavy toll on natural assets and the environment across the region. A new storyline began to gain traction as awareness of environmental damage caused by unmanaged regional growth intensified. The storyline depicted regional planning as a means to enhance capacity for protection of regional environmental and biophysical features. Acceptance of the new storyline emerged early in the SEQ regional planning process. The Queensland State Premier, Wayne Goss, publicly articulated this storyline in 1991 when he went on record to argue that the strong growth trends experienced in SEQ had to be addressed or the region would face severe environmental stresses (Abbott, 1995). The Premier then identified regional planning policies as the key response to damage to the region's natural environment and biophysical features caused by unmanaged growth. Interview Respondent 3 recalled the institutional emergence and political growth of this storyline:

> The need for environmental protection came from a slowly emerging understanding that human settlement was exerting a heavy toll on natural assets and the environment across the region.

Acceptance of the storyline intensified throughout the 1990s within SEQ regional planning. However, discursive framing of the nature and character of 'the environment' was initially uncertain. Discursive interpretations clarified over time as the system began to understand the inter-connectivity of the human and natural environments, as well the capacity for both regional and global environmental changes to generate stresses requiring regional planning responses. This led to the creation of another major storyline that characterized the concept of 'the environment' as malleable and capable of being related to a variety of environmental imperatives in the policy context of SEQ regional planning. In other words, discursive framing of 'the environment' could be fluid and flexible, capable of being adjusted to address whatever environmental stresses and biophysical features required policy responses at specific times. An increasing institutional acceptance of the inter-connectivity between human and natural environments also took hold over time. The inter-connectivity became more fully appreciated as the SEQ regional planning system matured and advanced. Consequently, the storyline of the environment as a multi-faceted and malleable concept, with multiple implications for regional planning, became institutionally entrenched. Interview Respondent 1, a senior state government planner, stated:

> 'Environment' was defined to cover a variety of policy topics, including agricultural land, water, nature conservation and open space.

Recognition of the interplay between human and natural environments in SEQ regional planning was important because it helped to compel institutional responses through environmental planning policies. The storyline of regional planning as a means to enhance capacity for protection of the environment and biophysical features in SEQ was an important discursive frame that could shape the nature and character of planning policies. New policies were established through regional growth management frameworks, along with strategies to use targets and indicators to measure environmental impacts (RCC, 1995, 1998, 2000). The storyline remains active at present, more than a quarter century since its emergence. Its acceptance may ebb and flow into the future but it appears likely to retain strength. Environmental impacts from future development in SEQ could be severe if environmental planning policies are not applied. If this were to happen, it could become significant public and political issue, which would potentially increase the weight of the storyline within the regional planning system. As Interview Respondent 4 noted:

> The discovery that much of the remaining vegetation in SEQ was of state significance created a greater appreciation of the need to

reduce environmental stresses through regional planning.

The storyline depicting 'the environment' as a malleable and shifting concept enabled an institutional context where environmental impacts were more freely detected, discussed and responded to through planning policies. It too remains valid at present. Historically, it has provided a policy basis for responding to specific environmental impacts including damage to natural assets, biodiversity decline, and deterioration of air and water quality. It appears likely that the storyline will hold institutional status relative to the extent of future institutional focus on responding to environmental impacts associated with growth through regional planning policies.

### 4.2. Storylines of sustainability

- *Sustainability principles should be reflected in SEQ regional planning policies*
- *Sustainability is a core policy agenda for regional planning*

The storyline of 'the environment' as a malleable concept within SEQ regional planning facilitated an expansion of planning responses to environmental imperatives during the late-1990s. This shift happened as new environmental imperatives entered the domain of regional planning. The SEQ system began to recognize global scale environmental stress with regional implications. The need to respond to sustainability imperatives intensified as a global problem from the late-1980s, following the publication of the *Brundtland Report* (Brundtland Commission, 1987). The *Brundtland Report* represented a major moment in global storylines related to sustainability and sustainable development as imperatives requiring institutional response. Consequently, storylines related to the need for sustainability emerged over time within many different institutional settings (Connor and Dovers, 2002). The Australian Federal government responded to demands for a greater articulation of sustainable development by publishing the National Strategy for Ecologically Sustainable Development (Australian Government, 1992; Dovers, 1995). Ecologically sustainable development (ESD) was defined as, "using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased" (Australian Government, 1992, p. 1).

Recognition of sustainability imperatives in SEQ regional planning initially connected to an institutional storyline that sustainability principles should be reflected in planning policies. The storyline emerged a few years after formal work began on developing a regional planning initiative in the 1990s. It was influenced by global storylines connected to the *Brundtland Report*, which had in turn filtered down through national policy processes in Australia. Political support for sustainability increased in Queensland in the years following the Australian Federal government's endorsement of ESD in 1992. The Queensland State government, along with local governments in SEQ, began to engage with sustainability as a planning policy issue from the mid-1990s. There was also an intensifying public discourse for sustainability goals to be articulated through regional planning policies. The non-government sector, particularly groups with environmental agendas, began to advocate strongly for sustainability within regional planning. Interview respondent 5, a senior representative of an environmental advocacy group, spoke to this development:

> There was broad support in SEQ for addressing sustainability following the Federal government's national strategy [for ESD].

The collaborative nature of the regional planning project in SEQ allowed environmental groups to have discursive input into policy processes. Lobbying by environmental groups helped sustainability to become a discursive issue. This added to a growing institutional recognition of the need for sustainability and led to an acceptance of the storyline that sustainability principles should be reflected in regional

planning in SEQ. There was a realization that the rate and nature of growth in SEQ was impacting adversely on natural systems. The imperatives of trying to achieve a balance between natural systems and the SEQ growth paradigm were being investigated. The perception of that balance varied between stakeholders and over time but sustainability nonetheless became a firm planning policy issue in SEQ throughout the 1990s. Many of the key planning instruments and policies devised during the 1990s expressed an institutional recognition of the sustainability imperative. For example, the *1995 Regional Framework for Growth Management*, the first regional planning framework for SEQ, offered strong policy support for responding to ecologically sustainable development principles through regional planning (RCC, 1995). Interview Respondent 8 discussed the emergence and institutional articulation of sustainability based on multiple stakeholder perspectives:

> The realization was that the rate and nature of growth in SEQ was impacting adversely on natural systems. The imperatives of trying to achieve a balance between the natural systems and the growth paradigm were being investigated. The perception of that balance varied between stakeholders and over time, but it was really throughout that era [the 1990s] that it [sustainability] became a planning issue in South East Queensland.

The *Regional Framework for Growth Management*, while important for its policy content, was less adequate in articulating clear strategies to guide and orientate planning activity towards meaningfully implementing policy goals. Its successors, released in 1998 and 2000, offered similar policy support for responding to sustainability, but again failed to provide meaningful operational guidance for associated planning activities. Consequently, the success of regional planning in institutionally responding to sustainability imperatives was questioned within the planning system by the turn of the century. This led to a growing concern in relation to the perceived failures of regional planning in delivering sustainability. These concerns were heightened by emerging data from regional environmental indicators, which showed continuing decline in regional environmental features, including air and water quality, was occurring in spite of policy frameworks. This intensified institutional concern that a decade of regional planning in SEQ had not adequately responded to the mounting problem of sustainability.

The emerging awareness that efforts to respond to sustainability imperatives through planning were largely failing led to significant discourse within the regional planning system. Debates focused on discursively reframing the importance and centrality of sustainability within planning policy in order to produce better outcomes. It took place at a time when there was an increasing political support for sustainability in Australia following the *Earth Summit*, and the *World Summit on Sustainable Development*, both held in 2002. On-going support for sustainability at federal level prompted the Queensland State government to reaffirm its commitment to sustainability as both a broad policy priority and as a specific priority for planning in SEQ. The need to substantively respond to sustainability gained substantial acceptance within the SEQ regional planning system due to a combination of four factors in the late-1990s and early-2000s. The first was the increasing institutional concern that the regional planning initiative had not adequately responded to the mounting problem despite a decade of action. These failures were perceived to be exacerbating environmental stresses connected to poorly planned development. The second factor was a growing local political recognition of the necessity of sustainability, which was significantly influenced by on-going global debates and international summits focused on sustainable development. This placed substantial pressure to respond on the SEQ planning system to translate discourses around sustainability into planning outcomes. The third factor was the emergence of sustainability indicators data, produced by the State government but never published, which clearly showed that sustainability targets were not being met in SEQ. The

fourth was increasing pressure from the community and non-government sectors. Many of these groups wanted more comprehensive planning responses to sustainability within regional planning and advocated strongly to that effect.

A new storyline of sustainability, which discursively framed sustainability as a core planning agenda, emerged during this time as a consequence of these four factors. It superseded the existing storyline of sustainability as an issue to be addressed through regional planning. The new storyline differentiated itself from the prior sustainability storyline by discursively framing sustainability as a major regional imperative and establishing it as a core issue for SEQ regional planning. In other words, sustainability became institutionally accepted as a central planning issue, rather than a peripheral concern. Sustainability was becoming a much more core part of the regional planning process by the early-2000s based on an increasing institutional acceptance that it must be central to planning activity. Significant transformations followed the emergence of the new storyline. For example, debates began which focused on the potential for balancing inevitable population growth with sustainability targets and indicators. Planning sub-committees, including the *Sustainability Indicators Working Group*, were formed to re-examine sustainable development as a planning issue and to identify specific policy issues and challenges associated with it in the context of SEQ. Interview Respondent 3, a professional representative of SEQ regional planning since 1990, spoke of the intensifying institutional strength of the storyline of sustainability as a core regional planning agenda:

> Sustainability was becoming a much more core part of the regional planning process by the early-2000s, led by a growing maturity within planning that sustainability should be a core planning concern…[there was] an increasing institutional acceptance that sustainability must be central to planning activity.

Perhaps the ultimate expression of the discursive weight of the storyline of sustainability as a core planning agenda occurred in 2005, when the pursuit of sustainability through regional planning was given a statutory basis as Desired Regional Outcome (DRO) Number 1 in the *South East Queensland Regional Plan 2005–2026* (OUM, 2005). The *2005 Regional Plan* was the first statutory regional plan for SEQ. It established sustainability as the premier policy goal of regional planning in SEQ and made responding to it a statutory planning issue. As such, it may be argued that this is the point at which the storyline of sustainability as a core planning agenda generated the most extensive degree of institutional acceptance and policy response within the SEQ regional planning system. Sustainability has retained that status within statutory regional planning instruments since, indicating the strength of the storyline. Ongoing institutional acceptance of this perspective is demonstrated by sustainability retaining its policy status as DRO Number 1 in the *South East Queensland Regional Plan 2009–2031* (DIP, 2009) and its presence as a key goal in *Shaping SEQ*, the current statutory SEQ regional plan (DILGP, 2017).

*4.3. Storylines of climate change*

- *Responding to climate change is an important regional planning policy issue*
- *Planning-led mitigation is a climate change response strategy for SEQ regional planning*
- *Climate change adaptation is a policy priority for SEQ regional planning*

Improving and refining environmental policy became a key discussion within the SEQ regional planning system in the early-2000s (Abbott, 2012). Institutionally responding to climate change quickly emerged as a vital element of an over-arching regional policy approach to environmental management. Climate change became a subject of focused discussion in 2002, when 'the greenhouse effect' was identified as a new area of policy development for regional planning (RCC, 2002).

An *Energy and Greenhouse Working Group* was formed in response. Its objective was to collate and present policy options for incorporating energy and greenhouse issues into regional planning. The Group released their report, *Final Report of the Energy and Greenhouse Working Group*, in May 2003 (RCC, 2003). The report comprehensively identified climate change as an emerging imperative in need of planning responses. It noted that information on climate change had a technical and scientific focus and that the translation of this information into regional planning frameworks would challenge planners as they tried to formulate responses through policy. Interview Respondent 7, a regional planning advisor, discussed this development:

> There was recognition by government that…there were some climate change issues that we needed to address. One of the vehicles through which that could be done was regional planning.

The *Energy and Greenhouse Working Group's* investigations marked the institutional recognition of climate change as a planning issue in SEQ (RCC, 2003). Responding to potential climate change impacts consequently began to generate significant institutional discourse. This was also influenced by broader discussions within political and public circles, which recognized the emerging challenges of climate change, its potential impacts for SEQ and need to respond through regional planning. Climate change response was identified as an area of policy improvement within the SEQ regional planning system. An institutional storyline that depicted responding to climate change as an important regional planning policy issue consequently gained institutional traction. Many of the local councils were key drivers of this change as they were independently pursuing climate change policies and initiatives because they felt a need to be proactive given their vulnerability of climate change impacts. Over time they used their influence within the regional planning system to encourage the State government to commit broader to policy settings. Interview Respondent 10, an Executive Director for Planning Policy with the Queensland government, spoke about how the storyline grew and led to institutional action within the SEQ regional planning regime:

> Many of the local councils were independently pursuing climate change policies and initiatives. So they were very, very keen and used the regional planning process to encourage the State government to actually commit to policy settings.

The storyline depicting climate change as an important regional planning policy issue gained strong institutional traction and became a central institutional agenda by the mid-2000s. The *Final Report of the Energy and Greenhouse Working Group* (RCC, 2003) prioritized planning-led mitigation as a strategy for responding to climate change. It identified a clear link between mitigation through greenhouse gas abatement and identified strong links between land-use, settlement patterns and transport related emissions. It highlighted greenhouse abatement as important at global, national, regional and local levels. A number of key institutional actors cited international literature at the time that prioritized mitigation and began to advocate for regional scale planning responses focused on mitigation in SEQ. The recommendations of the *Final Report of the Energy and Greenhouse Working Group* were also cited as evidence of the efficacy of planning-led mitigation. Regional environmental groups were also influential, as they began to use self-generated reports and models to demonstrate the near-term and extensive impacts that climate change could have on SEQ. Senior actors within SEQ regional planning sought advice from a range of agencies, councils and outside stakeholders about how to address mitigation. There was strong consensus that the area was important and desire to understand what emissions were, where they came from and to put into place planning policies in that realm. This led to an intensification of institutional support for establishing mitigation as part of regional planning policy. A new institutional storyline, which framed planning-led mitigation as a climate change response strategy for SEQ regional planning, consequently emerged. Interview Respondent 6, a

Queensland State government policy advisor, recalled how deep consultation and problem framing galvanized institutional support for the nascent mitigation storyline:

> We went through an exhaustive consultation process through a steering committee and through stakeholder groups. We sought advice from a range of people from councils and outside stakeholders about what we should seek to do about mitigation. There was an appetite to understand what emissions were, where they came from and to put into place policies in that realm. There was strong consensus that the area was important.

Mitigation continues to feature as a policy issue within SEQ regional planning, though it has lost significant institutional traction over the years. This is in part connected to a persistent discourse shared by some institutional actors that planning-led mitigation efforts, principally through manipulation of the built environment, exceed the scope of regional planning activities. There was a significant decline in the policy basis provided for planning-led mitigation between the two most recent SEQ regional plans: *South East Queensland Regional Plan 2009–2031* (DIP, 2009) and *Shaping SEQ* (DILGP, 2017). Mitigation policies in the *2009 Regional Plan* focused on densification, urban consolidation, reducing energy demand in buildings, increasing public transport options and promoting sub-tropical design standards in residential design. Mitigation features less prominently in *Shaping SEQ*, which does not include specific mitigation policies. Instead it proposes are far more limited articulation of mitigation and only includes an intention to "investigate how compact regional settlement patterns, urban design, coordinated infrastructure provision and management of natural assets can mitigate [climate change]" (DILGP, 2017, p. 161). This is a clear downgrading of mitigation as a policy concern for SEQ regional planning. Mitigation may continue to feature to a limited extent as a planning-led response to climate change in SEQ, though doubts about its efficacy as a planning endeavour could lead to further declines in institutional support for the storyline and an increased potential for it to lose institutional support and policy presence.

A later storyline framed climate change adaptation as a policy priority for SEQ regional planning. Three key events prompted the emergence and intensifying urgency of the storyline. The first event was the extensive policy debate on climate change adaptation initiated by the Australian Federal government in 2004. The need to respond to climate change through adaptation had become a key focus due to growing scientific evidence that mitigation alone would not be sufficient to manage to impacts in Australia already made inevitable by historic emissions (COAG, 2007). Activity at the federal level prompted the Queensland State government to consider the potential for regional planning in SEQ to develop a policy agenda focused on adaptation. Interview respondent 7 discussed the emerging acknowledgement of the institutional necessity to respond to climate adaptation through regional planning in SEQ:

> It [adaptation] came out of a recognition by government that it needed to deal with climate change. There was a significant level of activity at Commonwealth level. State government itself acknowledged that climate change adaptation needed to be addressed. One of the vehicles through which that could be done was through regional planning.

The publication of the *Fourth Assessment Report (AR4)* of the Intergovernmental Panel on Climate Change (IPCC) compounded institutional recognition of the storyline of adaptation as regional planning imperative. The report identified SEQ as one of the most vulnerable areas to climate change in Australia (Hennessy et al., 2007). This explicit warning triggered substantial alarm within the SEQ regional planning system, as it made clear that climate change impacts would compound existing severe weather events and natural hazards. This further emphasized the necessity of adaptation as a planning response in SEQ and added substantial discursive weight to the storyline of

adaptation. The third contributing event was a severe drought in SEQ that lasted from 2001 to 2009. Rainfall frequency and volume declined significantly, leading to extensive restrictions on water consumption. Institutional actors began to realize that the drought, as well as similar future events, could generate immense environmental, economic and social stresses for SEQ. While the drought was never directly connected either scientifically or popularly to climate change, it was seen by many institutional actors as illustrative of potential future scenarios under climate change. This caused significant alarm within SEQ regional planning and further embedded the storyline of climate change adaptation as an imperative. Interview Respondent 10 discussed this process:

> The drought led to a greater receptiveness and appreciation of the impacts of climate change and possible different futures and what might have to happen socially and economically to adapt to that. It was like a war-time coming together to address a threat.

The three events cumulatively provided a discursive basis for strong institutional articulation of the storyline depicting climate change adaptation as an imperative for SEQ regional planning. Institutional acceptance of the adaptation storyline was publicly expressed for the first time through policies in the *South East Queensland Regional Plan 2009–2031*, which stated that adaptation can "increase the resilience of communities, development, essential infrastructure, natural environments and economic sectors to natural hazards including the projected effects of climate change" (DIP, 2009, p. 44). Specific policies were also created to prioritise adaptation strategies to minimise vulnerability to sea level rise, riverine flooding, storm surges, heatwaves and other severe weather events associated with climate change. The adaptation storyline remains strong and was given updated policy priority in *Shaping SEQ*, the current statutory SEQ regional plan, which presents a 50-year strategic vision (DILGP, 2017). Adaptation content in *Shaping SEQ* follows the template set down in the *2009 Regional Plan* and continues to focus on minimising vulnerabilities to climate change impacts through coordinated regional land-use and strategic planning. The adaptation storyline looks likely to persist for the foreseeable future within SEQ regional planning given its prominence over the last decade and central policy position in *Shaping SEQ*. Moreover, the climate change adaptation storyline now appears to be a much more significant force than the mitigation storyline within the SEQ regional planning system.

## 5. Conclusion

This paper empirically identified three environmental imperatives that were discursively framed through storylines within the regional planning system in South East Queensland (SEQ) Australia system over 26 years. They were: protecting regional environmental and biophysical features, sustainability, and climate change. The imperatives of protecting regional environmental and biophysical features and sustainability each generated two institutional storylines, while the imperative of climate change generated three. The storylines did not spontaneously appear; they were shaped and conditioned over time by institutional actors, agencies and processes, as well as external events. The successive emergence of each imperative and associated storylines contributed to a growing capacity for environmental policy response within SEQ regional planning. Regional planning policies were established, and often improved, as storylines interacted with, or contributed to, dynamics and destabilisations in the institutional order of South East Queensland's regional planning system. This long-term institutional evolution is remarkable in itself. More remarkable is the fact it occurred in a governance context lacking a formal tier of regional government.

The majority of storylines grew in stature and importance over time as institutional recognition of changing environmental imperatives intensified and shifted. This is significant for three reasons. The first is that the SEQ regional planning system was founded in large part to lessen the environmental impacts of rapid growth. Whilst its ultimate successes in this regard are debatable, the aim of balancing strategic regional policy to minimise environmental harm has remained a defining discursive frame. The frame has underpinned the system through dynamic storylines for more than a quarter century and continues to do so. There are few comparable international examples, making the SEQ regional system an exemplar. Its policy achievements are even more impressive considering there is no formal tier of regional government and that its planning system is based on a model of partnership and collaboration. The second reason is that SEQ has always been pro-growth and conservative (Steele and Dodson, 2014). Development and environmental pressures have increased steadily over time. The fact that the regional planning system has consistently provided policy platforms to mediate those inter-related challenges through action rather than rhetoric is commendable. However, the decline of the mitigation storyline is the exception to this trend. Mitigation is no longer a central policy priority within SEQ regional planning and the focus has shifted definitively towards adaptation. This is in part an outcome of the pro-growth culture in SEQ. It is very difficult to reconcile intense urban development with greenhouse gas abatement through planning. As such, prioritising adaptation through policy was a strategic compromise. Adaptation became institutionally accepted as more achievable if regional planning was to manage growth trends rather than radically slow them. Moreover, the notion of slowing growth substantially was never likely to gain meaningful political support in conservative SEQ.

The third and perhaps most significant aspect of the stature and importance of environmental storylines in shaping SEQ regional planning policy is the fact they survived the period between 2012 and 2015. The 2012 Queensland state election unseated the Australian Labor Party (ALP), who had been in power almost continuously since 1989. The SEQ regional planning system was an ALP initiative but had traditionally enjoyed bipartisan support (Abbott, 2012). Following the 2012 election The Liberal-National Party (LNP) held government for three years before the ALP regained power. An extraordinary feature of the LNP tenure was their absolute refusal to engage with environmental concerns. They were particularly robust in their rejection of concept of climate change as either an environmental concern or a policy issue (Howes and Dedekorkut-Howes, 2017). The LNP government sought to dismantle large tracts of planning policy, particularly in the environmental space, almost immediately after assuming power. They viewed planning as an impediment to development and sought to reduce the capacity of planning systems across Queensland to safeguard environmental features and assets. To achieve this, the LNP government introduced new statutory State Planning Policies during their term that limited the focus of planning throughout Queensland to prioritise economic growth above all other objectives. Their key concern was to create a planning context that focused almost exclusively on supporting the economic potential of agriculture, tourism, construction and mineral/extractive industries. Within these policies, the only formal mention of 'environment' was the statement that additional planning priority could be given to "tourist development which can be shown to be complementary to an area's environmental, scenic and cultural value" (DSDIP, 2012, p. 3; 2013, p. 7). It is likely that SEQ regional planning policies with an environmental focus would have been significantly reduced had the LNP held power long enough to formulate a new statutory regional plan. Existing storylines would likely have been dismissed or supressed. However, a public backlash against the hardline LNP government saw them lose power to the ALP in the 2015 state election. The subsequent statutory regional plan, *Shaping SEQ* (DILGP, 2017), demonstrated the resilience and acceptance of the environmental storylines explored in this paper. They had remained intact despite the LNP government's contrary ideological position and found new and substantial policy articulation in *Shaping SEQ*, which has a 50-year strategic horizon.

Our focus on the case study of regional planning in South East

Queensland, Australia, is valuable to contemporary policy and planning scholarship. Specifically, the capacity of discursive framing to exert influence on regional policy processes via storylines is demonstrated by the specific case examined in this paper. Two recommendations may be offered to planning and environmental management systems that will increasingly be challenged by environmental imperatives over the coming decades. The first is that storylines are ephemeral. They may rise, fall, return or disappear completely. A storyline needs significant support to become dominant across time – perhaps to the degree that consensus on the validity of the storyline transcends the ideological differences political actors may bring as governments change. The second is that while it is possible to have an effective regional planning system without formal regional government, it is not ideal. The absence of a formal regional government may threaten the viability of regional planning initiatives as alternate governance arrangements are likely to be founded on less formal grounds. As such, they may be vulnerable to participants losing interest and undermining the integrity of the system, or participants trying to leverage unfair advantages in order to stay committed. Regional planning in SEQ may have thrived without formal regional government, but that does not mean the arrangement is ideal, or that the goodwill underpinning the SEQ system can be assumed to occur elsewhere. These recommendations, along with the conceptual and empirical insights provided by this paper, offer value to scholars and practitioners concerned with understanding how discursive framing shapes policy responses to environmental imperatives across time and scales.

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## References

Abbott, J., 1995. SEQ 2001: quality strategic planning for South East Queensland. Aust. Plan. 32 (3), 135–138.

Abbott, J., 2001. A partnership approach to regional planning in south east Queensland. Aust. Plan. 38 (3/4), 114–120.

Abbott, J., 2012. Collaborative Governance and Metropolitan Planning in South East Queensland – 1990-2010: From a Voluntary to a Statutory Model. University of Technology Sydney, Sydney.

Australian Government, 1992. National Strategy for Ecologically Sustainable Development. COAG Ecologically Sustainable Development Steering Committee., Canberra.

Bacchi, C., 2009. Analysing Policy: What's the Problem Represented to Be. Melbourne, Pearson Australia.

Brundtland Commission, 1987. Our Common Future. Oxford University Press, Oxford.

Bulkeley, H., 2000. Discourse coalitions and the Australian climate change policy network. Environ. Plan. C 18, 727–748.

Burhs, T., Aplin, G., 1999. Pathways towards sustainability: the australian approach. J. Environ. Plan. Manag. 42 (3), 315–340.

Coaffee, J., Healey, P., 2003. 'My Voice, My Place': tracking transformations in urban governance. Urban Stud. 40 (10), 1977–1999.

COAG [Council of Australian Governments], 2007. National Climate Change Adaptation Framework. Council of Australian Governments, Canberra.

Coffey, B., Marston, G., 2013. How neoliberalism and ecological modernization shaped environmental policy in Australia. J. Environ. Policy Plan. 15 (2), 179–199.

Connor, R.D., Dovers, S.R., 2002. Institutional Change and Learning for Sustainable Development – Working Paper 2002/1. Centre for Resource and Environmental Studies ANU., Canberra.

DILGP [Department of Infrastructure, Local Government and Planning], 2017. Shaping SEQ: South East Queensland Regional Plan 2017. Queensland Government, Brisbane.

DIP [Department of Infrastructure and Planning], 2009. South East Queensland Regional Plan 2009-2031. Queensland Government, Brisbane.

Dovers, S., 1995. Information, sustainability and policy. Aust. J. Environ. Manag. 2, 142–156.

DSDIP [Department of State Development, Infrastructure and Planning], 2012. Temporary State Planning Policy 2/12. Department of State Development, Infrastructure and Planning., Brisbane.

DSDIP [Department of State Development, Infrastructure and Planning], 2013. Temporary State Planning Policy 1/13. Department of State Development, Infrastructure and Planning., Brisbane.

Fisher, S., 2012. Policy storylines in Indian climate politics: opening new political spaces. Environ. Plann. C Gov. Policy 30, 109–127.

Gleeson, B., Dodson, J., Spiller, M., 2010. Metropolitan Governance for the Australian City: The Case for Reform. Urban Research Program, Griffith University, Brisbane.

Gore, C.D., Robinson, P., 2009. Local government response to climate change: our last, best hope? In: Selin, H., VanDeveer, S.D. (Eds.), Changing Climates in North American Politics: Institutions, Policymaking and Multilevel Governance. MIT Press, Cambridge, MA, pp. 138–158.

Hajer, M., 1993. Discourse coalitions and the institutionalization of practice: the case of acid rain in Great Britain. In: Fischer, F., Forester, J. (Eds.), The Argumentative Turn in Policy Analysis and Planning. Routledge, London.

Hajer, M., 1995. The Politics of Environmental Discourse, Environmental Modernization and the Policy Process. Clarendon Press, Oxford.

Hajer, M., Versteeg, W., 2005. A decade of discourse analysis of environmental politics: achievements, challenges, perspectives. J. Environ. Policy Plan. 7 (3), 175–184.

Hennessy, K., Fitzharris, B., Bates, B.C., Harvey, N., Howden, S.M., Hughes, L., et al., 2007. Australia and New Zealand. In: Parry, M.L., Canziani, O.F., Palutikof, J.P., van der Linden, P.J., Hanson, C.E. (Eds.), Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge.

Hodson, M., Marven, S., 2009. Urban Ecological Security: a new urban paradigm? Int. J. Urban Reg. Res. 33, 193–215.

Howes, M., Dedekorkut-Howes, A., 2017. The adaptation roller-coaster: planning for climate change on the Gold Coast, Queensland. Proceedings of the State of Australian Cities Conference.

ID, 2017. South East Queensland Population and Dwellings – ABS Census Data. Available from https://profile.id.com.au/australia/population?WebID=330&EndYear=1991 &DataType=EN (Accessed 7 February 2018). .

Kingston, C., Caballero, G., 2009. Comparing theories of institutional change. J. Inst. Econ. 5, 151–180.

Lidskog, R., Elander, I., 2012. Ecological modernization in practice? The case of sustainable development in Sweden. J. Environ. Policy Plan. 14 (4), 411–427.

Marston, G., 2004. Social Policy and Discourse Analysis: Policy Change in Public Housing. Ashgate Publishing., Aldershot.

Mason, S.G., Fragkias, M., 2018. Metropolitan planning organizations and climate change action. Urban Clim. 25, 37–50.

Matthews, T., 2013. Institutional perspectives on operationalising climate adaptation through planning. Plan. Theory Pract. 14 (2), 198–210.

OUM [Office of Urban Management], 2005. South East Queensland Regional Plan 2005-2026. Office of Urban Management., Brisbane.

Plummer, H.R., 2006. The evolution of sustainable development strategies in Canada: an assessment of three federal natural resource management agencies. Sustain. Dev. 14, 16–32.

RCC [Regional Coordination Committee], 1995. Regional Framework for Growth Management 1995. Department of Housing, Local Government and Planning, Queensland.

RCC [Regional Coordination Committee], 1998. Regional Framework for Growth Management 1998. Regional Coordination Committee., Brisbane.

RCC [Regional Coordination Committee], 2000. Regional Framework for Growth Management 2000. Department of Local Government and Planning, Queensland.

RCC [Regional Coordination Committee], 2002. SEQ 2021 Performance Monitoring Report. Department of Local Government and Planning, Queensland.

RCC [Regional Coordination Committee], 2003. Final Report of the Energy and Greenhouse Working Group. Regional Coordination Committee, Brisbane.

RPAG [Regional Planning Advisory Group], 1992. Midterm Review Report. Regional Planning Advisory Group, Brisbane.

Shin, H., Choi, B.D., 2014. Risk perceptions in UK climate change and energy policy narratives. J. Environ. Policy Plan. 17, 87–104.

Skinner, J., Gillam, E., 1989. Recent Population Changes and Their Implications for Queensland. University of Queensland Applied Population Research Unit., Brisbane.

Steele, W., Dodson, J., 2014. Made in Queensland: planning reform and rhetoric. Aust. Plan. 51 (2), 141–150.

Stone, D., 2002. Policy Paradox: the Art of Political Decision-making, revised edition). W.W. Norton, New York.

Torfing, J., 1999. New Theories of Discourse – Laclau, Mouffe and Zizen. Wiley-Blackwell, Hoboken.

Yanow, D., 1997. How Does a Policy Mean: Interpreting Policy and Organizational Actions. Georgetown University Press, Washington.

Yanow, D., 2000. Conducting Interpretive Policy Analysis. Sage, London.